

State Water Resources Control Board Delta Flow Criteria

Les Grober
May 26, 2011



State Water Board Processes

- The Board routinely develops flow criteria with regulatory effect through formal processes that are specified in law
- Standard setting (Bay-Delta Plan)
- Implementation (such as Water Right Decision 1641)

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Delta Flow Criteria Process

- Delta flow criteria process different from standard State Water Board process
- Legislature directed the Board per Water Code §85086 to develop new flow criteria for the Delta ecosystem necessary to protect public trust resources within nine months... to inform future planning activities, the Delta Plan, and Bay Delta Conservation Plan
- Report answers a specific question: "What flows are necessary to protect fishery resources in the Delta under current conditions?"

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Delta Flow Criteria Process

- Workshop March, 2010
- Delta Flow Criteria Report adopted by the Board and transmitted to the Delta Stewardship Council August, 2010
- Information will be used along with other information on competing uses of water, economics, CEQA etc. to inform State Water Board water quality and water rights processes

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Limitations of Criteria

- Technical assessment only of best available science on flow needs for fish under existing conditions
- Do not address upstream environmental needs, including cold water pool and terrestrial issues
- Criteria have no regulatory or adjudicative effect and are not pre-decisional to future Board actions
- Do not consider the public interest, other environmental needs, or competing demands for water

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Summary Criteria

- Delta Outflows: 75% of unimpaired flow January to June, fall X2 in wetter years
- Sacramento River Inflows: 75% of unimpaired flow November to June, late fall/winter Wilkins Slough pulse flows, positive flows downstream of Georgiana Slough November to June, fall flows
- San Joaquin River Inflows: 60% of unimpaired flow February to June, fall flows
- Hydrodynamics: Old & Middle River flows, San Joaquin River flows to exports, Jersey Point flows

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Other Summary Determinations

Actions should be taken to achieve:

- variability and the natural hydrograph
- floodplain activation and other habitat improvements
- improved water quality
- appropriate cold water pool management
- adaptive management

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Methodology

Three step process:

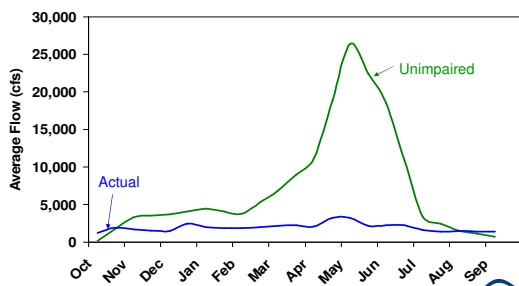
- 1) Identify the narrative goals and criteria for protection of aquatic resource
- 2) Identify threshold numeric flow values needed to achieve these goals
- 3) Determine flow criteria as a percentage of unimpaired flow that would achieve, in the context of an adaptive management framework, the numeric flow values and the goals

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San Joaquin River Near Vernalis Flow Water Year 2003 (Below Normal)

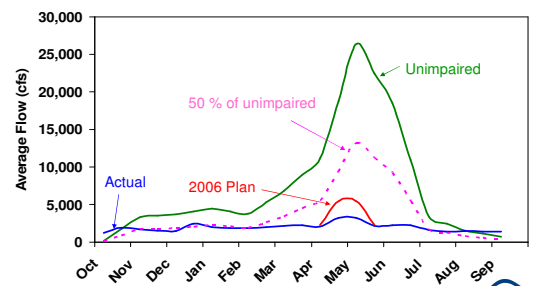


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San Joaquin River Near Vernalis Flow Water Year 2003 (Below Normal)



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San Joaquin River Flow Objectives

- Concurrent with review of southern Delta salinity objectives
- Two-day technical workshop held January 6 & 7, 2011
- First step of comprehensive review of Bay-Delta Plan

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Focus of January, 2011 Workshop

- Discuss technical basis for developing alternative San Joaquin River flow and southern Delta salinity objectives
- Other Issues: include non-technical, environmental review, economics, policy and procedural
- Additional comments: Due by noon, Feb. 8

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Importance of the Natural Flow Regime

- A more natural flow regime would improve ecosystem functions
 - Fish communities
 - Food web
 - Habitat connectivity
 - Fluvial hydrogeomorphological processes
 - Temperature

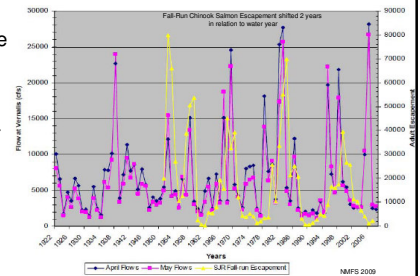
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Flow Versus Salmon Abundance

- Primary influence on adult escapement is flow two and a half years earlier



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Other Concurrent Processes

- Delta Stewardship Council: the Delta Plan
- Bay Delta Conservation Plan: Conservation plan, new conveyance, environmental documentation

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Comprehensive Review of Bay-Delta Plan and Next Steps

- Complete SJR Flows and Southern Delta Salinity Plan updates
- Review and update other plan objectives
- Implement SJR flow objectives
- Implement other Bay-Delta Plan objectives

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More Information

- <http://www.waterboards.ca.gov/>
and follow links to Bay Delta
- Les Grober
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